We claim:

1. A method, comprising:

storing an executable program in an implantable pulse generator, where the implantable pulse generator includes a parameter log and the executable program includes one or more programmable parameters having a first state;

detecting a change in the first state of the one or more programmable parameters to a second state; and

storing in the parameter log the first state of the one or more programmable parameters changed to the second state.

2. The method of claim 1, including establishing a communication link between the implantable pulse generator and a medical device programmer;

transmitting a first signal from the medical device programmer to change the first state of the one or more programmable parameters to the second state; and

receiving the first signal to change the first state of the one or more programmable parameters to the second state.

3. The method of claim 2, where transmitting the first signal includes controlling the executable program.

4. The method of claim 3, where controlling the executable program includes terminating the executable program; and

storing a log of the executable program termination.

5. The method of claim 3, where controlling the executable program includes activating the executable program; and

storing a log of the executable program activation.

6. The method of claim 2, including generating one or more electrical energy shocks upon receiving a second signal;

storing in the parameter log information related to the one or more electrical energy shocks; and

storing a log of the second signal.

7. The method of claim 2, where the implantable pulse generator includes an electronic circuitry reset program and transmitting the first signal from the medical device programmer to change the first state of the one or more programmable parameters includes executing the electronic circuitry reset program when the first signal is received.

8. The method of claim 1, including terminating the executable program when the implantable pulse generator receives a magnetic signal;

detecting the change includes detecting when the executable program terminates due to the magnetic signal; and

storing a log of the magnetic signal in the parameter log.

9. The method of claim 1, where the implantable pulse generator includes a battery, and terminating the executable program when the battery expires;

detecting the change includes detecting when the executable program terminates due to the expired battery; and

storing a log of the expired batter in the parameter log.

10. The method of claim 1, including providing additional information to the parameter log; and

storing the additional information in the parameter log.

11. The method of claim 10, where providing additional information includes supplying a date and a time when the change in the first state is detected.

12. The method of claim 1, including detecting the execution of an electronic circuitry reset program in the implantable pulse generator; and

storing a log of the execution of the electronic circuitry reset program in the parameter log.

13. The method of claim 1, including detecting a change in the second state of the one or more programmable parameters to a third state; and

storing in the parameter log the second state of the one or more programmable parameters changed to the third state.

14. The method of claim 1, including storing in the parameter log the first state of the one or more programmable parameters unchanged to the second state.

15. The method of claim 1, including detecting the execution of an integrity correction program in the implantable pulse generator; and

storing a log of the execution of the integrity correction program in the parameter log.

16. An implantable pulse generator, comprising:

a memory circuit to store a parameter log and an executable program, where the executable program includes one or more programmable parameters having a first state;

a parameter analysis circuit coupled to the memory circuit, where the parameter analysis circuit analyzes the first state of the one or more programmable parameters to detect a change in the first state to a second state of the one or more programmable parameters; and

a microprocessor coupled to the memory circuit and the parameter analysis circuit, where the microprocessor stores the first state of the one or more programmable parameters changed to the second state in the parameter log.

17. The implantable pulse generator of claim 16, including a communication circuit coupled to the microprocessor, where the communication circuit establishes a communication link between the implantable pulse generator and a medical device programmer, and the medical device programmer transmits a first signal that is received by the communication circuit to change the first state of the one or more programmable parameters to the second state.

18. The implantable pulse generator of claim 17, where the first signal received by the communication circuit controls the executable program.

19. The implantable pulse generator of claim 18, where the first signal terminates the executable program.

20. The implantable pulse generator of claim 16, including an electrical pulse generator circuit coupled to the microprocessor, where the medical device programmer produces a second signal received by the communication circuit that causes the microprocessor to control the electrical pulse generator circuit to generates one or more electrical energy shocks, and the microprocessor stores information related to the one or more electrical energy shocks in the parameter log.

21. The implantable pulse generator of claim 16, where the microprocessor incudes an internal clock to provide information relative to time, including a time and a date, and where the microprocessor stores the time and the date in the parameter log when the first state of the one or more programmable parameters is changed to the second state.

22. A method, comprising:

storing an executable program in an implantable pulse generator, wherein the executable program includes at least one programmable parameter having a first state;

storing a parameter log in the implantable pulse generator;

detecting an accidental change in the first state of the at least one programmable parameter to a second state; and

storing in the parameter log the first state of the at least one programmable parameters accidentally changed to the second state.

23. The method of claim 22, wherein detecting the accidental change includes detecting one of an accidental deactivation of the executable program and an accidental activation of the executable program.

24. The method of claim 22, wherein storing the parameter log includes:

establishing a communication link between the implantable pulse generator and a medical device programmer; and

transmitting the parameter log stored in the implantable pulse generator to the medical device programmer.

25. The method of claim 24, wherein establishing the communication link includes:

transmitting a first signal from the medical device programmer to change the first state of the one or more programmable parameters to the second state; and

receiving the first signal to change the first state of the one or more programmable parameters to the second state.

26. The method of claim 22, wherein detecting the accidental change includes detecting a non-programmer initiated change from the first state of the one or more programmable parameters to the second state.

27. The method of claim 22, wherein detecting the accidental change includes detecting a
expiration of energy supplied by a battery in the implantable pulse generator.

28. The method of claim 22, wherein detecting the accidental change includes detecting execution of an electronic circuitry reset program.

29. The method of claim 22, wherein detecting the accidental change includes detecting termination of the executable program.

30. The method of claim 22, wherein detecting the accidental change includes detecting use of a magnetic signal to control operation of the implantable pulse generator.

31. The method of claim 22, wherein storing includes recording execution of an integrity correction program in the implantable pulse generator.

32. The method of claim 22, wherein detecting the accidental change includes detecting a change due to an influence external to the implantable pulse generator.

Sub B1

33. A system including an implantable pulse generator, programmer and a communication link between the implantable pulse generator and the programmer, the implantable pulse generator comprising:

an executable program in an implantable pulse generator, wherein the executable program includes one or more programmable parameters having a first state and a second state;

a parameter log for storing a change in a state of the one or more programmable parameters;

the programmer comprising means for producing a first signal to change the first state of the one or more programmable parameters to the second state, the first signal being transmitted to the implantable pulse generator by the communication link; and

the implantable pulse generator further comprising:

means for receiving the first signal to change the first state of the one or more programmable parameters to the second state; and

means for detecting a change in the first state of the one or more programmable parameters to the second state, the change being stored in the parameter log.

34. The system of claim 33, wherein the means for detecting includes means for detecting a change includes means for detecting an accidental change from the first state of the one or more programmable parameters.

35. The system of claim 33, wherein the means for detecting includes means for detecting a non-programmer initiated change from the first state of the one or more programmable parameters.

Sub B1

36. A method, comprising:

storing an executable program in a cardiac rhythm management device, wherein the cardiac rhythm management device includes a parameter log and the executable program includes one or more programmable parameters having a first state;

transmitting a signal from a medical device programmer to change the first state of at least one programmable parameter to a second state;

detecting a change of the at least one programmable parameter to the second state; and

storing in the parameter log the first state of the at least one programmable parameters changed to the second state.

37. The method of claim 36, wherein storing the executable program includes storing the executable program in an implantable device.

38. The method of claim 36, wherein detecting the change of the at least one programmable parameter to the second state includes detecting a change due to an influence external to the cardiac rhythm management device.

39. A cardiac rhythm management device, comprising:

a sensor for sensing cardiac signals;

an electrical pulse generation circuit;

a control circuit operable connected to both the sensor to receive sensed cardiac signals and the electrical pulse generation circuit; and

a memory operably connected to the control circuit, wherein the memory stores data indicative of sensed cardiac signals, an executable program used by the control circuit, parameters for the executable program, a device activity log, and a parameter change log.

40. The device of claim 39, wherein the parameter change log stores a first state of a parameter when the parameter is changed to a second state.

41. The device of claim 40, wherein the sensed cardiac data includes arrhythmic episodes, and wherein the device activity log stores information related to one or more electrical energy shocks delivered by the pulse generation circuit.